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APPLICATION NO.	FILING DAT	E FIRST NAM	ED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,311	07/29/2003	Darryl	W. Baird	P07145US02/RFH	4461
881	7590 04/6	06/2006		EXAM	INER
	IARBISON PLI	ROSENBERG, LAURA B			
SUITE 900		ART UNIT	PAPER NUMBER		
ALEXANDR	IA, VA 22314			3616	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/628,311	BAIRD ET AL.				
Office Action Summary	Examiner	Art Unit				
	Laura B. Rosenberg	3616				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on <u>25 Ja</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) Claim(s) 1-31 is/are pending in the application. 4a) Of the above claim(s) 3-7,9-25 and 29-31 is 5) Claim(s) is/are allowed. 6) Claim(s) 1,2,8 and 26-28 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on 11 May 2004 is/are: a)[Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examine	r election requirement. r. ☐ accepted or b) objected to be drawing(s) be held in abeyance. See ion is required if the drawing(s) is objected	oy the Examiner. 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species 1h in the reply filed on 25 January 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract is objected to because "means" is used in line 6.

Drawings

4. Figures 18-20 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

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abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 2, 8, 27, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "the output shaft" in line 2; claim 8 recites the limitation "the trailer" in line 2; claim 27 recites the limitations "the electric input" in line 2, "the voltage" in line 3, and "the operating current peak" in lines 3-4; claim 28 recites the limitation "the solid state relays" in line 1. There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Quinn et al. (5,306,031). Quinn et al. disclose a demountable drive mechanism (can be seen in figure 1) able to be coupled to a drive shaft (including #10) of an operating device (for example, chassis height adjustment device), the drive mechanism being directly secured to the drive shaft and able to cause the drive shaft to rotate, the drive mechanism comprising:

- A geared electric motor (including #16) having an output (including unlabeled shaft
 in figure 1 that extends from motor #16 and is connected to gearbox #18) able to be
 coupled to the drive shaft (via connection to gearbox #18, gearbox output shaft #28,
 and gears #26, 30)
- Torque arm (for example, including #20) able to engage a reaction surface (for example, engagement with portion of gear #26) so that the electric motor can impact torque to the drive shaft
- Control means (including #36, 40, 42) able to control operation of the electric motor (column 3, lines 48-60)
- Torque arm is mounted on the drive mechanism parallel to the output (for example,
 both extend horizontally, as seen in figure 1)

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (5,306,031) in view of Felsen (3,888,464). Although the electric motor is powered by some power source, Quinn et al. do not specifically disclose at least one battery powering the electric motor.

Felsen teaches a demountable drive mechanism (best seen in figures 4, 5) able to be coupled to a shaft (including #38) of an operating device (for example, vehicle jacking system), the drive mechanism being directly secured to the shaft and able to cause the shaft to move, the drive mechanism comprising:

- A geared electric motor (including #32) having an output able to be coupled to the shaft (best seen in figures 4, 5)
- Control means (including #75-78) able to control operation of the electric motor (column 5)
- The electric motor being powered by at least one battery (column 3, lines 29-33) It would have been obvious to one skilled in the art at the time that the invention was made to modify the demountable drive mechanism of Quinn et al. such that it comprised at least one battery powering the electric motor as claimed in view of the teachings of Felsen so as to provide power for the electric motor in an easily stored and inexpensive power source.

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11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (5,306,031) in view of Schneider et al. (5,176,391). Quinn et al. do not disclose details about the operating current of the electric motor.

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Schneider et al. teach a demountable drive mechanism (best seen in figure 5) able to be coupled to an operating device (for example, vehicle leveling system), the drive mechanism comprising:

- A motor (including #98) having an output able to be coupled to the operating device (for example, via supply passage #100)
- Control means able to control operation of the motor (column 5, lines 16-21)
- The motor has an operating current that is monitored wherein a maximum allowable current is set as an amount above the operating current being monitored so that should there be a significant and rapid increase in operating current, the motor shuts down (column 11, lines 31-45)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the demountable drive mechanism of Quinn et al. such that it comprised a motor shut off feature as claimed in view of the teachings of Schneider et al. so as to prevent burn out of the motor (Schneider et al.: column 11, lines 38-42).

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

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from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1 and 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 14, 18, and 24 of U.S. Patent No. 6,598,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 8 of the present application read on claims 1, 4, 14, 18, and 24 of the above-mentioned patent.

Allowable Subject Matter

14. None of the prior art of record appears to read on claims 27 and 28, as best understood by the examiner, and the subject matter of the claims appears to be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. However, upon applicant's amendment to overcome the rejections and objections raised by the examiner and upon the examiner's better

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understanding of the invention, a comparison of the prior art to the claim will again be made.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Douglas discloses a demountable drive mechanism including details about a motor current and relay system.

Kingsbury discloses a demountable drive mechanism including details about a solenoid/relay system.

Obes, Dalton, Rose, Chappelle, Kuntz, Jr., Nelson, Whittingham, Mena, Aline et al., Burkhead, Lawrence, and Hatcher each disclose a demountable drive mechanism for vehicle landing gear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Laura B Rosenberg Patent Examiner

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LBR

SUPERVISORY PATENT EXAMINER

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